Appl. No. 10/817,392 Amdt. dated September 19, 2007 Amendment under 37 CFR 1.116 Expedited Procedure Examining Group 2622

## **REMARKS/ARGUMENTS**

In this amendment, claims 1, 11, 17, and 20 are amended. No claims are canceled, and no claims are added. Thus, after entry of this amendment, claims 1-22 will remain pending.

## Rejection under 35 U.S.C. §102(b) and 103(a), Rinaldi

Claims 1-2, 5-8, 11-12 and 15-22 were rejected under 35 U.S.C. 102(b) as being anticipated by Rinaldi et al (US Patent No. 6,327,002 Bl). Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rinaldi et al. Claims 3-4 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rinaldi et al in view of the admitted prior art (Figs. 1A & 1B, and page 2, [0005]-[0006]).

## Claims 1-10

Claim 1 is allowable as Rinaldi does not teach or suggest each and every element of claim 1. For example, claim 1 recites:

a pixel pipeline circuit configured to provide a pixel stream comprising digital pixel values, wherein the pixel pipeline circuit has an input connected with a digital pixel buffer;

an encoder coupled to an output of the pixel pipeline circuit and <u>having</u> one or more processor elements configured to convert the pixel stream to digital sample values for a target analog signal representing the pixel stream in the target format, thereby generating a base data stream at a base sampling rate;

a supersampling circuit coupled to an output of the encoder and configured to generate a supersampled data stream at a supersampling rate from the base data stream, the supersampling rate being higher than the base sampling rate

In one instance, input switching matrix 68 is asserted to be the claimed encoder. See Final Office Action, page 5. Applicants reiterate that switching matrix 68 is simply a set of multiplexers. See Rinaldi, col. 3 lines 63-66. At page 3 of the advisory action, it is asserted that multiplexers convert inputs to outputs. Even if it is true that a multiplexer can be viewed as performing such a conversion, nowhere is it asserted, and nowhere does Rinaldi teach or suggest, that the multiplexers convert a pixel stream into digital sample values for a target analog signal.

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The actual data values at the input of a multiplexer are the <u>same</u> data values at the output of the multiplexer, therefore, a multiplexer does not convert data values at the input (digital pixel values) into <u>different</u> data values at the output (digital sample values for a target analog signal). Additionally, a multiplexer does not include processor elements for processing such data in order to convert the data from a pixel stream into digital sample values for a target analog signal. In contrast, claim 1 recites "an encoder ... having one or more <u>processor elements configured to convert the pixel stream to digital sample values for a target analog signal."</u>

Additionally, the decimation filters 62, 64 are also asserted to be the encoders, and the mux 50 and the ADCs 58, 60 are asserted to be the pixel pipeline circuit. *See* Advisory Action, page 2 and Final Office Action page 5. The mux 50 receives external <u>analog</u> video inputs. *See Rinaldi*, col. 2 lines 60-62. This is also evidenced by the analog to digital converters. *Id.*, FIG. 2. Thus, Rinaldi does not teach or suggest "wherein the pixel pipeline circuit has an input connected with a <u>digital</u> pixel buffer," as recited in claim 1.

Moreover, the limitation that "the supersampling rate [is] higher than the base sampling rate" of the target analog output signal has never been addressed in an office action. The upsampling circuit 70 "changes the sampling frequency of the signals to match the desired output sampling frequencies," and not to be higher than the output sampling frequencies. *Id.*, col. 4 lines 6-7. Nowhere has it been asserted that upsampling module 70 outputs a sampling rate higher than the desired output sampling frequencies of the target analog output signal, such as NTSC or PAL. Accordingly, Rinaldi does not teach or suggest this limitation.

For at least these reasons, claim 1 is allowable over Rinaldi. As claim 1 is allowable, dependent claims 2-10 are also allowable for at least the same rationale.

## Claims 11-23

Applicants submit that independent claim 11, and its dependent claims 12-16; independent claim 17, and its dependent claims 18-19; and independent claim 20, and its dependent claims 21-22, are allowable for at least the same reasons as claim 1.

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<u>Claims 20-22</u>

In addition to being allowable for at least the same reasons as claim 1, claim 20 is

also allowable for additional reasons. For example, claim 20 recites "wherein the supersampling

rate is selected so as to provide substantial attenuation of a higher frequency echo in the analog

output signal, the higher frequency echo occurring in a frequency band above a baseband of the

analog output signal."

This claim limitation has not been addressed in any office action, and Rinaldi

does not mention, teach, or suggest anything regarding the attenuation of a higher frequency

echo, as recited in claim 20.

**CONCLUSION** 

In view of the foregoing, Applicants believe all claims now pending in this

Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of

this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,

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Attachments

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